

The

The California Academy of Sciences

April 1993

ACADEMY

NEWSLETTER

DEDICATED TO SCIENTIFIC RESEARCH AND EDUCATION, INSPIRING RESPECT FOR THE NATURAL WORLD

MEMBERS MEETINGS

A TOAD FOR ALL SEASONS

with Dr. Robert C. Drewes,
Wednesday, April 14, 2 pm and 7:30 pm



Have you ever wondered what the difference is between a toad and a frog? Here is your chance to find out about these tailless amphibians when the Academy's own Dr. Robert Drewes presents a slide-illustrated program for the April meeting.

During the last few decades, scientists have been discovering that frogs are far more complex, diverse and fascinating than was

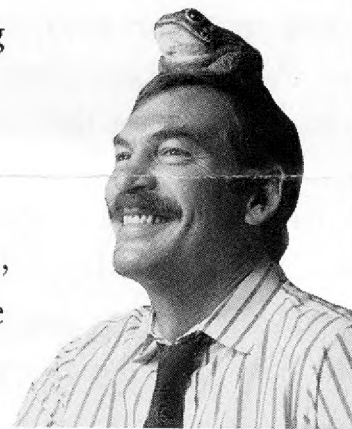
previously thought—and now these amphibians seem to be disappearing!

Herpetologist Dr. Drewes, has spent much of the past 23 years exploring swamps, deserts and montane forests in inaccessible parts of Africa and related areas such as Madagascar and the Seychelles Islands, in search of frogs. He will share his latest research projects which include a study on heterocannibalism and kin-selection in the Arabuko-Sokoke Forest in Kenya, a biodiversity survey of the Impenetrable Forest, southwest Uganda, and the biogeography of the ancient Eastern Arc Mountains of Tanzania.

Dr. Drewes is a Fellow of the Royal Geographical Society, a member of the Species Survival Commission of the IUCN and a Trustee of the Biodiversity Foundation for Africa. He has a great love for Africa, its people and history and is an elder of the Rendille, a nomadic group inhabiting arid northern Kenya.

Please remember to present your membership card at the Auditorium door. The Academy Store will be open before and after each lecture.

Next month's program will be on Wednesday, May 12 at 2 pm and 7:30 pm and will feature Kevin Hansen, wildlife biologist and author of *Cougar, The American Lion*.



MEMBER NEWS

On Thursday, April 22, the Academy's eighth annual fundraising ball, "Jewels of the Night," will take place from 6:30 pm to 12:30 am. Mrs. Lewis W. Coleman is

JEWELS OF THE NIGHT

this year's Dinner Chair. Guests at this black-tie event

will enjoy an evening of dining, dancing and entertainment in their favorite halls throughout the Academy.

Tickets begin at \$200 per person. For tickets or more information, please call event coordinator, Brenda Zimmerman, at (510) 526-3900.

You probably noticed that the newsletter you are reading has an extra fold in it this month. This is a cost-saving measure which decreases our postage costs.

DOCENT TOURS

Starting April 1 the Docent Council will be offering hall-specific tours of *Wild California*, *Life Through Time* and the *Steinbart Aquarium* on Tuesdays, Wednesdays and Thursdays at 1:30 pm. Call 750-7153 for details and reservations.



Bob Drewes

EYED REED
FROG
*Hyperolius
argus*

AN INVITATION

The Eastwood Associates honors and recognizes those whose generosity will endow the future of the Academy. We hope you will join this distinguished group by making the Academy a beneficiary in your financial plans. Your gift may take a variety of forms including:

WILL—A specific gift of cash or property, a percentage of your estate, or the residue of your estate.

TRUSTS—These popular estate planning vehicles provide many benefits. A gift to the Academy can be incorporated in a living or testamentary trust.

INSURANCE—The Academy can be remembered as a beneficiary of your life insurance, annuities or retirement plans.

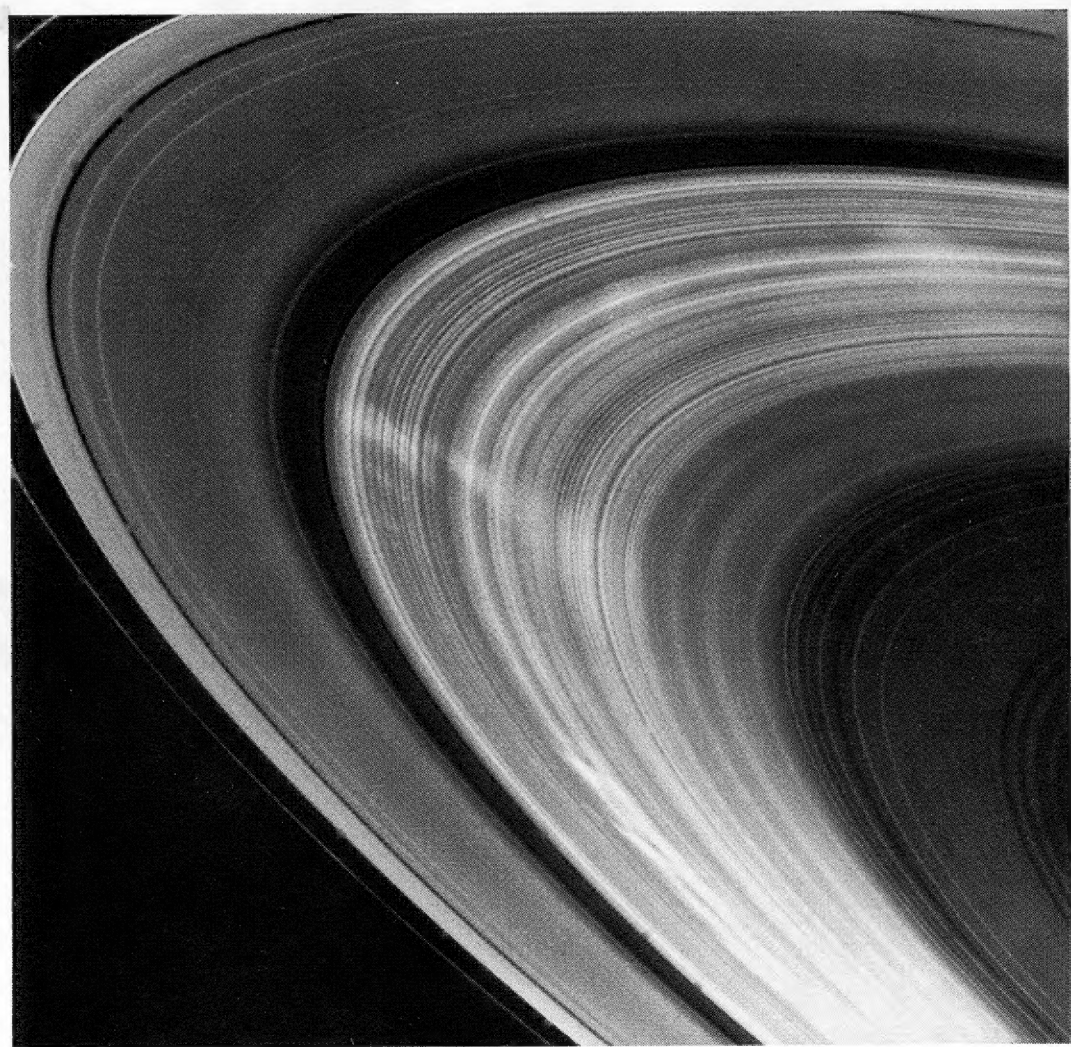
LIFE INCOME PLANS—Any gift provides special satisfaction but life income gifts also contain benefits such as increased lifetime income, tax benefits and investment management.

We invite Academy members to invest in the future by joining the Eastwood Associates. For further information please use the coupon on the back page or phone 750-7216.

YOUNG AUDIENCES

On Sunday, April 18 at 1 pm, Young Audiences presents **Jeremy & Julietta**. Through clowning, magic, acrobatics and juggling, **Jeremy & Julietta** create their own circus. This program is free after general admission and is made possible through the SF Grants for the Arts and the McKesson Foundation.

MORRISON PLANETARIUM



NASA/JPL

EXPLORING THE UNIVERSE

On **April 13 at 7:30** the Morrison Planetarium presents "**Voyager Exploration of the Outer Solar System**" with Dr. Jeffrey Cuzzi of NASA's Ames Research Center. The presentation will feature Voyager spacecraft images and recent results in a guided tour of the outer solar system. Dr. Cuzzi will explain how these results help scientists better understand our own planet's beginnings.

The finely detailed ring systems and retinues of small, orbiting satellites around Jupiter, Saturn, Uranus and Neptune are of profound interest because they contain clues concerning the origin of the solar system. Join us for this intriguing look into the world of space.

The final program in the series is: **May 11 - "Quasars: Powerhouses of the Universe,"** with Dr. Alex Fillipenko. Tickets are \$2 each and can be purchased by using the coupon form on the back page. Call 750-7129 for more information about the series.

SKY SHOWS

Nights of Ancient Days explores the important role the night sky played to early cultures. The sky was a clock, a calendar and a book of fables filled with ancient wisdom. This sky show is presented at 2 pm on weekdays and 2 & 4 pm on weekends.

Planetarium on Parade highlights the past and future of our own Morrison Planetarium and is presented at 1 & 3 pm on weekends.

Startalk, a look at the local night sky, continues on weekends at 12:00 noon. Call 750-7141 for sky show information.

RESEARCH



Memorial to the victims at El Mozote

In January, at the request of the Supreme Court of El Salvador, the Academy sent Charles Cecil of the Anthropology Department to consult with the Instituto de Medicina Legal on human rights abuses during the Civil War in that country.

During his stay, Mr. Cecil di-

rected the retrieval of human remains from the village of El Mozote and trained dentists and pathologists from the Instituto de Medicina Legal in basic forensic anthropological retrieval techniques. He also worked with representatives of the UN, the FMLN, and the Catholic Church Human Rights Commission. This is a continuing project and Mr. Cecil will return to El Salvador for further training sessions and consultation.

TRADITIONAL ARTS

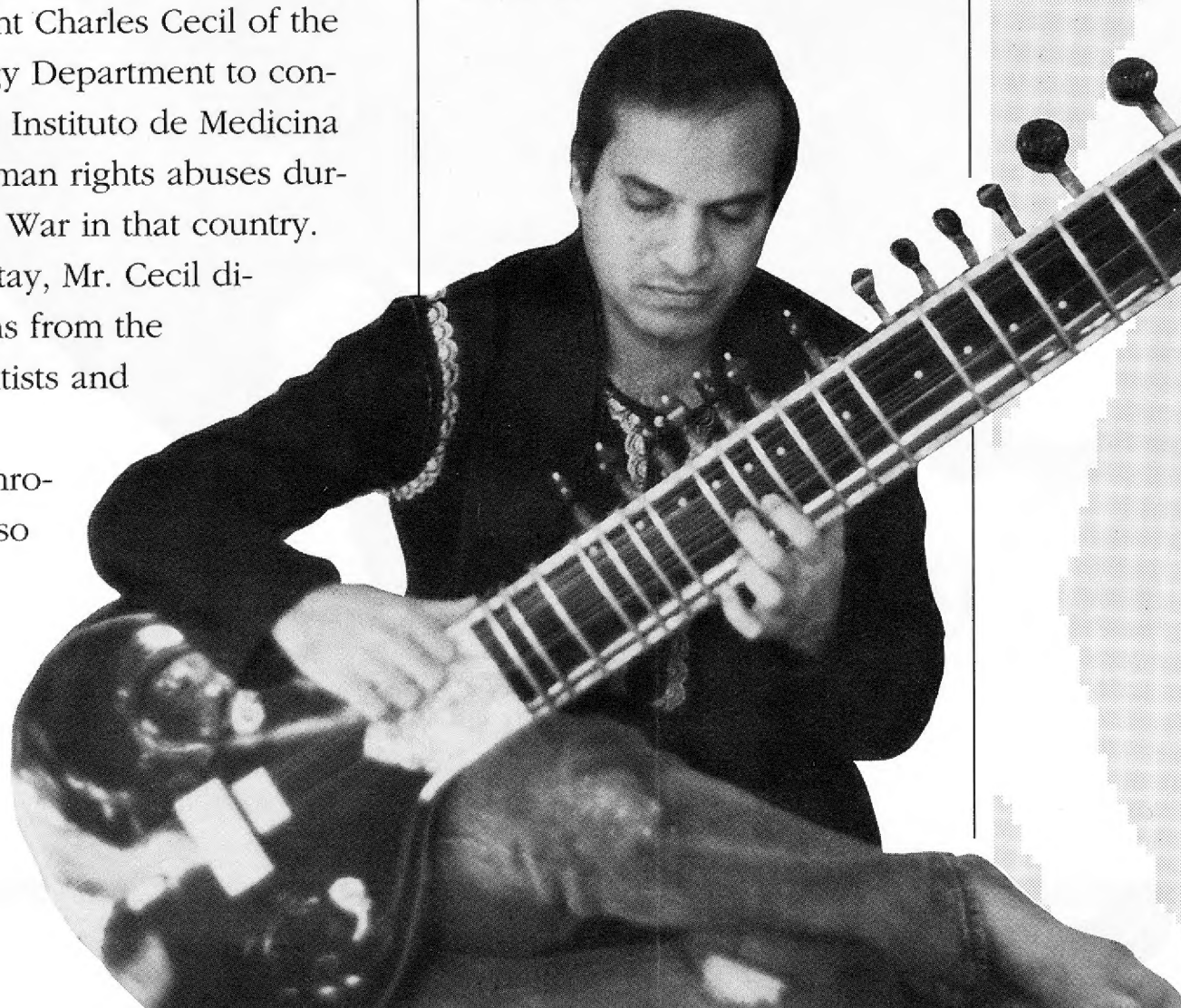
Journey to the far corners of the world with the Academy's Traditional Arts program. Held Saturdays at 1 pm these programs are free after general admission.

April 3 — Guillermo Martinez Lopez, from the state of Michoacan in Mexico, demonstrates the making of pre-Columbian ceremonial instruments. Using simple handtools and natural materials, he fashions the *chirmiya* (three-holed flute), *buehuatl* (drum), and *chicahuatzlis* (rainstick and raingourd) as well as rattles and a Huichol Indian flute.

April 10 — Quilter Gail Moore displays her handsewn quilts and family heirlooms, and discusses the care, conservation and repair of antique quilts. She'll discuss how to determine the age by the fabrics used and invites the audience to bring in their own quilts for identification.

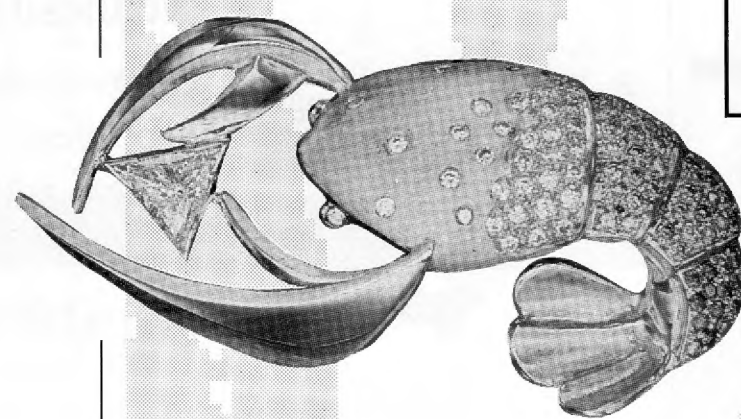
April 17 — Brenda Schuman-Post's collection of folk oboes and shawms from around the world is the focus of her presentation on the oboe's spiritual and social function in different cultures. Brenda compares the sounds made by each instrument and illustrates the musical styles of the country of origin.

April 24 — Born into a family of renowned *sitar* players, Ustad Habib Khan has developed a unique fingering technique and personal style of playing the stringed instrument. For this performance of north Indian classical music, Mr. Khan is accompanied by Aushim Chaudhuri on *tabla* (drums).



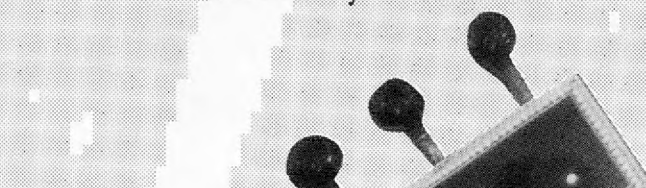
ART OF DIAMONDS

A glittering, new exhibit, *Art of Diamonds* opens on April 18 and continues through May 16. Every two years, the Diamond Information Center sponsors a national jewelry design competition called Diamonds Today, considered the most prestigious diamond design contest in the country. The theme for this



year's competition is "Beyond Nature" and features designs inspired by flora and fauna, the stars and the sea. This brilliant collection of diamonds will be accompanied by images of diamonds by leading art photographers.

The one million dollar Diamonds Today jewelry collection is comprised of 29 pieces created by top U.S. designers. They were chosen on the basis of creativity, innovative use of materials, wearability and adherence to the competition's nature theme. Be sure to see this sparkling exhibit during its month-long visit to the Academy.



GORILLA

Opening April 17 at the exhibit *Gorilla* brief visit. This timely mountain gorillas of the Research Center which was The exhibit features the collection and on-location research. As this publication was ransacked by forces of the war with the government. been forced to evacuate the gorillas remain in the wild. one-third of all the gorillas through exposure to tourism and the military presence animals in the park and

In a **VERY SPECIAL KARISOKE DIRECTOR H THE MIDST OF GUERRA** 7:30 PM. Dr. Steklis will war zone and the importance of conservation and research gorilla. Please use the for up-to-date information call the Academy's **GOR** details. Please be sure to take advantage of the of the Kar

✿ April is the first full month of Spring named from *apirire*, which is Latin for which will be highlighted in our new hardest known substance on Earth, carbon years ago. ✿ The Greeks thought diamonds thought they were splinters from falling

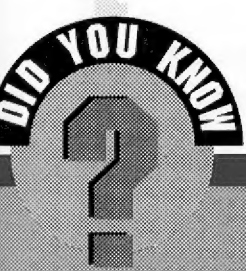


Michael S. Nichols

MOUNTAIN GORILLA
Gorilla gorilla beringei

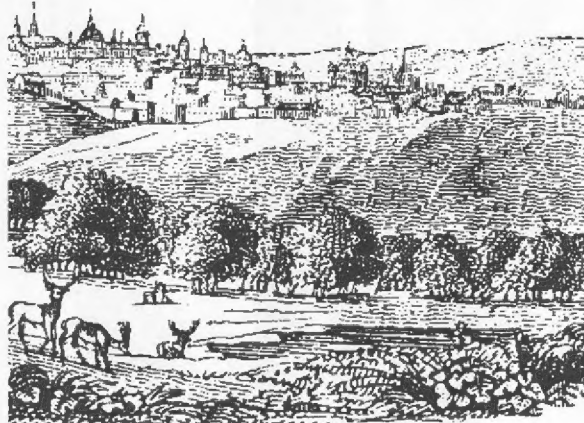
GORILLAS

and continuing through May 2, returns to the Academy for a exhibit focuses on the vanishing wanda protected in the Karisoke s established by the late Dian Fossey. mpelling photographs of Nick Nichols ordings by Dr. Bernie Krause. going to press, Karisoke had been Rwandese Patriotic Front in the civil ll 34 staff members of the center have e area. Approximately 600 mountain —300 are in the Karisoke area. Fully as are habituated to humans, either groups or through research activities, poses a very dangerous situation for accustomed to human protection. ECTURE, the Academy welcomes **DIETER STEKLIS** for **GORILLAS IN ILLAS** on **Wednesday APRIL 21** at describe his recent experiences in this ant role Karisoke has played in the a of the highly endangered mountain m on the back page to order tickets. on about the situation in Karisoke, **lla Watch Hotline** at 750-7142 for to enjoy this poignant exhibit and s timely lecture with the Director soke Research Center.



ng in the Northern Hemisphere. The month is r "to open". ♦ April's birthstone is the diamond exhibit *Art of Diamonds*. ♦ Diamonds are the mposed of carbon that crystallized millions of nds were the tears of the gods while the Romans ng stars with which Eros' arrows were tipped. ♦

ACADEMY TRAVEL



A TASTE OF SPAIN: A CULINARY TOUR

WITH NARSAI DAVID AND DAPHNE DERVEN
SEPTEMBER 16-OCTOBER 5

The Academy is pleased to present its third culinary adventure which will tour many of the finest wine and food producing areas of Spain. Travellers will savor an array of regional specialties and wines and gain a greater appreciation of the culture and history of Spain. Our trip will begin in Barcelona and continue to Olite, Madrid, Toledo, Cordoba, Jerez and Seville.

Narsai David, respected author, columnist, television and radio personality, will guide our tasting adventures accompanied by Daphne Derven, Academy Director of Public Programs. Daphne was recently in Spain and is an archeologist specializing in the study of food and culture. Call 750-7348 for more information.

SUMMER EXHIBITS

Hands-On Science

A new hands-on science center for families in Cowell Hall opening late May.

Birds of a Feather

A new exhibit which explores the fascinating natural history of birds, opening in June in Lovell White Hall.

Jurassic in the Park

A monstrously exciting exhibit opening in July which explores the world of the dinosaurs featured in Michael Crichton's best-selling book and movie *Jurassic Park*. Watch upcoming issues of the Academy Newsletter for details.

ADULT EDUCATION

Understanding Global Warming and its Ecological Implications

Many scientists believe that the Earth's temperature will rise dramatically over the coming century. The driving force is consumption of fossil fuels and forest biomass by humans and the release of carbon dioxide into the atmosphere. Dr. Christopher Potter will examine climate and ecological simulation models and encourage hands-on manipulation of mathematical models. April 8-May 6 (4 Thursdays), 7-9 pm. Cost: \$45 members / \$55 non-members.

Scientific Illustration with Mixed Media

Join Planetarium artist Lynette Cook for an exciting workshop using a variety of media to create realistic scientific renderings. This mixed-media technique combines watercolor, gouache, colored pencils and acrylics. April 3 & 17 (2 Saturdays), 9:30-4:30 pm. Cost: \$75 members / \$85 non-members.

Call 750-7100 for more information.

LECTURES

For the following lectures please use the coupon on the back page to order your tickets. Call 750-7128 for recorded lecture information.

"ECHO OF THE ELEPHANTS"

WITH CYNTHIA MOSS
THURSDAY, APRIL 1, 7:30 PM

Echo is the elephant matriarch of a 14-member family in Kenya's Amboseli National Park. The history of Echo's family—their births, deaths, tragedies, and joys—is the focus of a special lecture by conservationist Cynthia Moss.

Moss has been studying the elephants in the Park since 1972 and has come to know and recognize more than 700 elephants. She has chronicled their relationships and behavior in three books: the recently released, *Echo of the Elephants*, which is also a new PBS documentary, *Portraits in the Wild* and *Elephant Memories*.

Through her lecture and slide presentation, Moss will bring the audience into the daily lives of these magnificent mammals.

MEMBERS \$10 /
NON-MEMBERS \$12

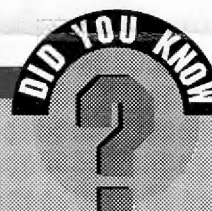
"ANTARCTICA"

WITH BARRY LOPEZ,
DR. BRIAN TOON AND
DR. JOHN MCCOSKER
FRIDAY, APRIL 2, 7:30 PM

Join renowned author, Barry Lopez, NASA scientist Brian Toon, and John McCosker of the Steinhart Aquarium as they explore the beauty and problems of Antarctica. As part of the Academy of American Poets' "A Language for Nature: Writers on the Environment" series, the California Academy of Sciences is proud to present this special program.

The program will include a presentation by each guest followed by a thoughtful conversation about this frigid and complex landscape.

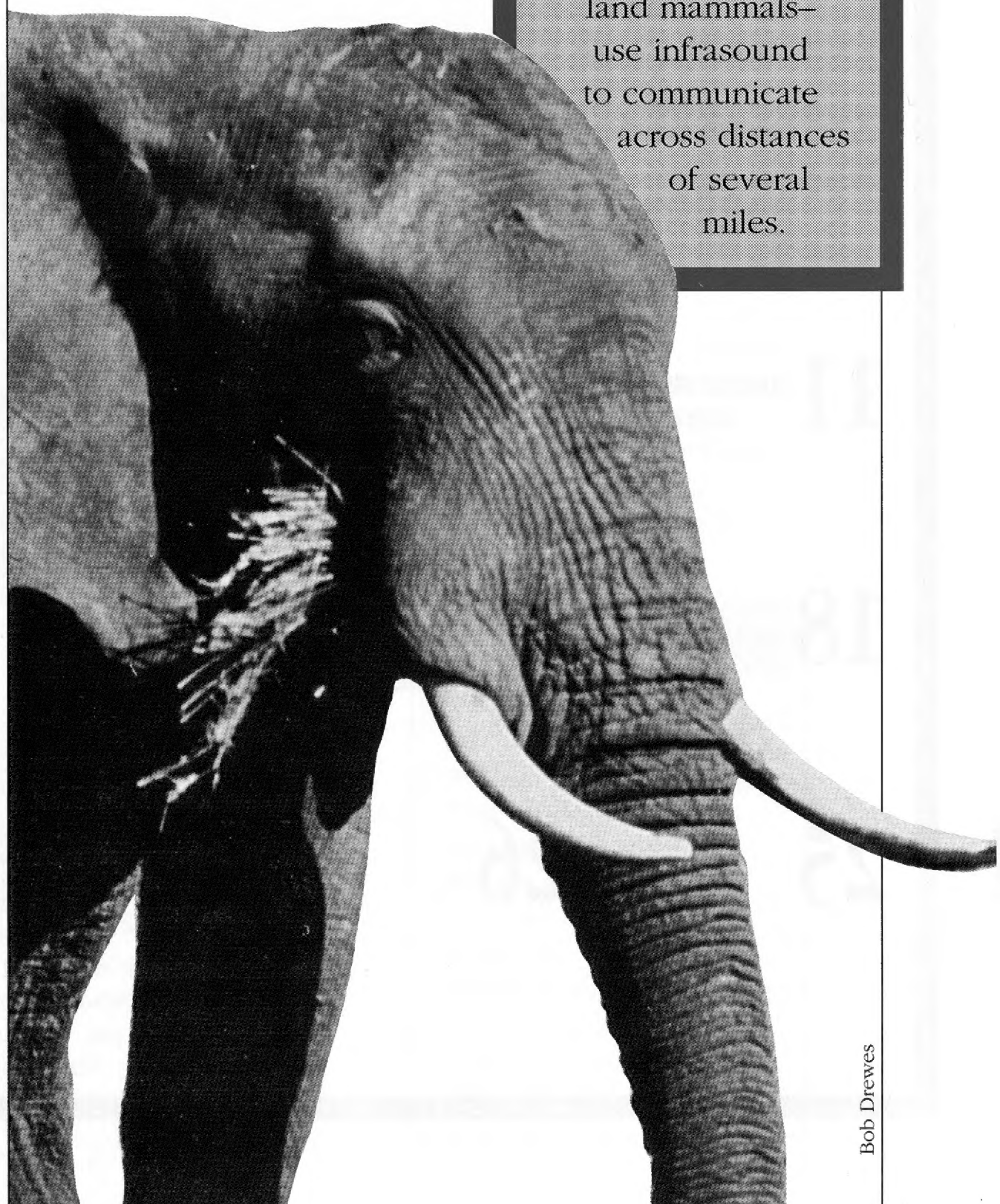
MEMBERS \$6 /
NON-MEMBERS \$8



The continent of Antarctica covers 1/16th of the world's surface and its ice stores 75% of the world's fresh water.

Research indicates that elephants—perhaps alone among land mammals—use infrasound to communicate across distances of several miles.

AFRICAN ELEPHANT
Loxodonta africana



Bob Drewes

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LECTURES	Qty/Members	Qty/Non-members	Total
ECHO OF THE ELEPHANTS / April 1	x \$ 10	x \$ 12	=
ANTARCTICA / April 2	x \$ 6	x \$ 8	=
GORILLA / April 21	x \$ 6	x \$ 8	=
TOTAL \$			
EXPLORING THE UNIVERSE	Quantity		Total
VOYAGER EXPLORATION / April 13	x \$ 2		=
QUASARS / May 11	x \$ 2		=
TOTAL \$			
EASTWOOD ASSOCIATES			
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Credit card charges gladly accepted over \$10.

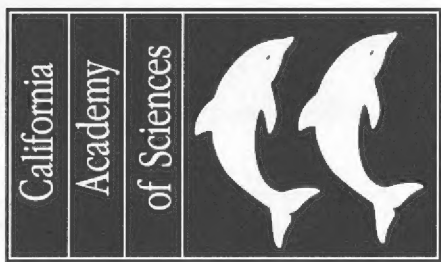
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Signature _____

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Membership Office, Ticket Services
California Academy of Sciences
Golden Gate Park, San Francisco, CA 94118

Daytime Phone _____

TOTAL PAYMENT ENCLOSED \$ _____ PLEASE INCLUDE A S.A.S.E. FOR EACH SERIES FOR WHICH YOU SUBSCRIBE. NO REFUNDS/NO EXCHANGES.



VISITOR SERVICES
The Academy is open every day of the year from 10 am to 5 pm.

Academy Information: 750-7145

Academy Store: 750-7330

Admissions: 750-7159

Aquarium: 750-7247

Biodiversity Resource Center:

750- 7361

Development Office: 750-7216

Education Office: 750-7100

Group Information: 750-7043

Laserium: 750-7138

Lectures: 750-7128

Library: 750-7102

Lost and Found: 750-7150

Membership Office: 750-7111

Planetarium: 750-7141

Planned Giving: 750-7216

Security: 750-7000

Switchboard: 221-5100

Travel: 750-7348

Volunteer Services: 750-7154

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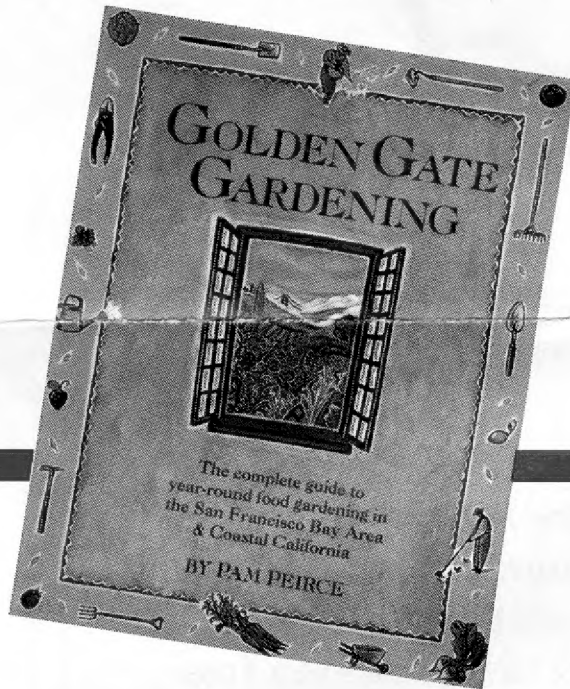
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THE ACADEMY STORE

Authors' Day at the Academy

On April 5, bring your kids to meet a live tarantula and Sneed B. Collard III, author of *Creepy Creatures, Do They Scare You?* at 10:30 am and 12:30 pm. He'll lead us on a voyage of discovery into the fascinating world of insects. At 2 pm, ask Pam Pierce, author of *Golden Gate Gardening*, your toughest gardening questions as she discusses the challenges of Bay Area gardening. On April 19 meet Suzanna Marshak, author of *I Am an Ocean* at 10:30 am and 12:30pm.



APRIL

1993

SUNDAY

DOLPHIN FEEDINGS
are at 10:30 am, 12:30 pm, 2:30 pm and 4:30 pm every day.

4 "River of Gold" exhibit closes
Daylight Savings Time Begins

11 **PLANETARIUM SKY SHOWS**
on weekends at 12, 1, 2, 3, and 4.

18 "Art of Diamonds" exhibit opens
Young Audiences, Clowns, 1 pm

25

MONDAY

PENGUIN FEEDINGS
are at 11:30 am, and 4:00 pm every day.

5 Authors Day at 10:30, 12:30 & 2

12

19 Authors Day at 10:30 & 12:30

26

TUESDAY

FISH ROUNDABOUT FEEDINGS
are at 2:00 pm every day.

6 **PLANETARIUM SKY SHOWS**
on weekdays at 2:00 pm

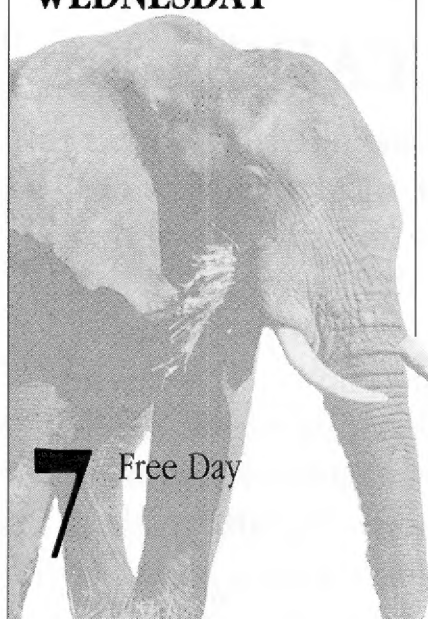
13 Exploring the Universe, "Voyager Exploration of the Outer Solar System," 7:30 pm

20

27

Invention Convention!
Come see the winners of this year's Invention Convention at the Academy from April 27 at 10 am through April 28 at 3 pm. The winners from grades K-8 will be featured in African Hall.

WEDNESDAY



7 Free Day

14 Members Meetings, "A Toad for All Seasons," 2 pm and 7:30 pm

21 Lecture, "Gorillas in the Midst of Guerrillas," with H. Dieter Steklis, 7:30 pm

28

THURSDAY

1 Lecture, "Echo of the Elephants," with Cynthia Moss, 7:30 pm

8 Amory Lovins in conversation at the Herbst Theatre, 8 pm

15

22

29

DOCENT TOURS
are available on Tuesdays, Wednesdays and Thursdays at 1:30 pm. Call 750-7153 for details.

FRIDAY

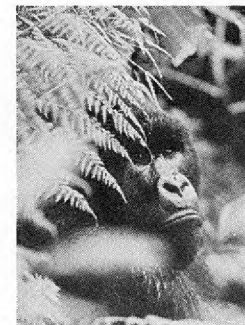
2 Lecture, "Antarctica," with Barry Lopez, Brian Toon and John McCosker, 7:30 pm

9

16

23

30



EARTH CELEBRATIONS
Celebrate Islands on Saturdays at 12:30 & 3 pm

SATURDAY

3 Traditional Arts, Pre-Columbian Instruments, 1 pm

10 Traditional Arts, Quilting, 1 pm

17 "Gorilla" exhibit opens
Traditional Arts, Folk Oboes, 1 pm

24 Traditional Arts, Sitar Music, 1 pm

Astronomy Day, Telescopes in Courtyard, 10-5 pm